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# RESPONSE TO INTERVENTION: CONCERNS OF TEACHER FIDELITY

by  
Amanda B. Sinko

A Thesis

Submitted in partial fulfillment of the requirements of the  
Master of Arts Degree  
of  
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Approved by \_\_\_\_\_

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## ABSTRACT

AMANDA B. SINKO  
RESPONSE TO INTERVENTION: CONCERNS OF TEACHER FIDELITY  
2008  
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SCHOOL PSYCHOLOGY

The present study set out to fill a gap in the current body of research addressing the concern of teacher fidelity within the Response to Intervention model. It examined the effect of the formal recording of interventions by teachers for students in RTI Tier I of reading in an attempt to control for teacher fidelity. The sample was drawn from the kindergarten and first grade of eight elementary schools in a large suburban public school district in southern New Jersey. The students' reading achievement was assessed through the use of pre and post scores of Dynamic Indicators of Basic Early Literacy kindergarten and first grade measures. It was hypothesized the students of teachers who formally recorded interventions implemented would achieve greater gains as reflected in post DIBELS scores, than those students of teachers who were not asked to formally document interventions implemented. Contrary to the hypothesis, the control group made statistically significant gains on the kindergarten DIBELS measure.

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## Chapter One: The Problem

### Need

Since the reauthorization of the Individuals with Disabilities Education Act in 2004 much attention has shifted away from the IQ-achievement discrepancy model as a means of identifying students with learning disabilities. Nationwide educators are now focusing their attention on the promising policy of Response to Intervention (RTI) as means of providing support to all struggling learners across general education classrooms as well as students with disabilities (NASDSE & CASE, 2006).

There are three main components of RTI. First, RTI demands high-quality instruction/intervention that is researched based and is matched to student need. Second, RTI requires the use of learning rate and level of performance in ongoing decision making regarding the use of more or less intense interventions. Learning rate refers to the student's growth in achievement compared to levels prior to the intervention, and level of performance refers to the student's relative standing on some area of achievement compared to expected performance. Third, RTI bases important educational decisions on student response to instruction across multiple tiers of intervention (NASDSE & CASE, 2006).

The RTI model requires the use of a three tiered model of intervention/instruction. Tier I contains the core curriculum and serves approximately 80-85% of the students.

Interventions that exist in Tier I focus on group interventions for students and are considered preventative and proactive. Tier II serves approximately 15% of students and interventions are also based on group instruction. Students in Tier II receive instruction in Tier I and are supplemented with interventions of Tier II. Tier III serves approximately 5% of students and interventions are intense and individually based. If students reach their targeted goals they can move between tiers (NASDSE & CASE, 2006).

Although RTI's use of research based interventions in order to meet the needs of individual students and progress monitoring in order to make informed educational decisions sounds very promising, it is not without its potential flaws. Researchers have given much attention to the interventions being used in RTI to ensure their research based integrity. However, the interventions are only as good as we can guarantee their appropriate use by teachers or other educators responsible for implementing the intervention. Therefore, teacher fidelity should be of utmost concern in RTI; however, researchers have focused little attention on this matter.

Researchers have not entirely ignored the issue and several have called for the need for research in the area of teacher fidelity within the RTI model. Noell and Gansle (2006) reveal that implementation of interventions has received little attention in the RTI literature and emphasize the necessity of documentation that interventions were in fact implemented. Noell and Gansle (2006) further assert even with high quality pre-intervention assessments, intervention design, progress monitoring, and data evaluation, without guaranteeing implementation of the intervention, the system becomes a hollow shell that produces meaningless outcomes. In turn, RTI's main goal of providing services



at the point of concern without having to wait for a formal assessment or evaluation crumbles and becomes just another means toward the same end. Similarly, Fuchs and Deshler (2007) contend there are many unanswered questions that need to be examined and considered when implementing RTI. Fuchs and Deshler (2007) urge districts, schools, and administrators to set expectations for the implementation of RTI, provide adequate resources, and support the use of procedures that ensure fidelity of intervention. Further, Fuchs and Fuchs (2006), Instructional Research Group (2006), and Kingler and Edwards (2006) all argue ensuring that each intervention is implemented with fidelity is a key issue in RTI.

In conclusion, there is an undeniable need to study teacher fidelity within the RTI model. RTI has been an exciting advancement in the educational field, one that promises no delay in services for any struggling students. Much research has been conducted in the area of effectiveness of research based interventions in the RTI construct. However, these interventions are only as good as they can be guaranteed to be implemented with fidelity. Research on teacher fidelity in RTI is essential and would fill a gap in the research, one that is called for by existing literature.

#### **Problem/Purpose**

This study set out to fill a gap in the current body of research addressing the concern of teacher fidelity within the Response to Intervention model.

## Hypothesis

This study hypothesized that after eight weeks students in the experimental group, in which teachers formally recorded interventions implemented as well as the frequency, duration, intensity, and group size of interventions on the “RTI-Student Intervention Tracking Form” for kindergarten and first grade students in RTI Tier I of reading, would achieve higher posttest scores on the DIBELS subtests ISF, PSF, and NWF, in comparison to students in the control group, in which teachers did not alter their intervention tracking procedures in any manner. The null hypothesis stated that the use of the “RTI-Student Intervention Tracking Form” would have no effect on students’ reading achievement as measured by the DIBELS subtests ISF, PSF, and NWF posttest scores. This study sought to reject the null hypothesis at a 95 percent confidence level.

## Operational Definitions

**Dynamic Indicators of Basic Early Literacy (DIBELS):** A set of standardized, individually administered measures of early literacy development. The measures are designed to be short (one minute) fluency measures used to regularly monitor the development of pre-reading and early reading skills. This study is interested in the kindergarten measure, initial sound fluency (ISF), and the first grade measures, phonemic segmentation fluency (PSF), and nonsense word fluency (NWF) (University of Oregon Center on Teaching and Learning, n.d.).

**Duration of Intervention:** number of weeks the intervention was implemented

**Frequency of Intervention:** number of days per week the intervention was implemented

Group Size of Intervention: number of students per group who received the intervention

Intensity of Intervention: number of minutes per week the intervention was implemented

Reading Achievement: for the purpose of this study, reading achievement will be assessed by comparing pre and post DIBELS kindergarten and first grade subtest scores

Response to Intervention (RTI): the practice of providing high-quality instruction and interventions matched to student need, monitoring progress frequently to make decisions about changes in instruction or goals, and applying child response data to important educational decisions (NASDE & CASE, 2006).

RTI-Student Intervention Tracking Form: form which teachers in the experimental group of the study formally recorded the intervention implemented as well as the frequency, duration, intensity, and group size of intervention (see appendix)

RTI's Tier I: x% of students are designated as potentially at risk after universal screening and placed Tier I (defined by participating school district).

RTI's Tier I Interventions: in-class interventions including differential instruction, small group instruction, appropriate learning centers, opportunities for individual attention, basic classroom modifications, and additional supportive home activities (defined by participating school district).

Teacher Fidelity: strict adherence to the proper use of appropriate interventions

Universal Screening: DIBELS scores, occurs 3 times per year used to identify at risk Tier I students (defined by participating school district).

## Assumptions

This study makes several assumptions. First, the assumption is made that the use of the “RTI-Student Intervention Tracking Form” is a valid means of controlling for teacher fidelity. While it is likely the intervention tracking form brings heightened awareness for the teachers of the importance of the intervention, it does not necessarily guarantee interventions are implemented with fidelity. There is no certainty that the teachers in the experimental group implement the interventions with more fidelity than the teachers of the control group who do not utilize the “RTI-Student Intervention Tracking Form.” It is also assumed the interventions implemented in RTI Tier I are proven effective and research based.

## Limitations

Several limitations exist within this study. One limitation in this study is the use of DIBELS as a means of assessing reading achievement. DIBELS has been criticized as not measuring comprehension or vocabulary. A second limitation to this study is that the sample is relatively homogenous with regard to socioeconomic status. A third limitation is the results will not be able to be generalized outside of the participating school district.

## Overview

In Chapter 2 the researcher will review the existing literature and research that has been conducted on RTI and DIBELS. In Chapter 3 the researcher will lay out the details of the study including a description of the participants, research design, intervention, measures, and data collection.

## Chapter Two: Review of the Literature

### Introduction

Educators are beginning to make the move away from the IQ-discrepancy model toward the Response to Intervention (RTI) model to provide services for their students. Many researchers and educators believe the waiting to fail method of the IQ-discrepancy model in addressing the needs of struggling readers does not provide fast enough services in the crucial early reading years. Researchers claim RTI, however, can address the needs of early struggling readers much quicker and in a more efficient manner. Many schools have only just begun the process of making the switch to the RTI model, and with this move more concerns arise with the use of RTI, such as the issue of teacher fidelity. Dynamic Indicators of Basic Early Literacy (DIBELS) has become a widespread way of screening and determining the areas in need of skill development in early readers, especially in the areas of letter naming, phonemic awareness, and oral reading fluency. However, many opponents of DIBELS claim it does not sufficiently address reading comprehension or vocabulary. Upon the review of the literature the researcher will expose the vast research that has been put into RTI and DIBELS in the recent years, both supporting their use as well as acknowledging their associated concerns and limitations. The review of the literature will establish RTI as the current best practices model for serving struggling readers, and DIBELS as a valid method of screening early readers' root reading skill development.

## RTI, NCLB, and IDEA 2004

Many researchers and educational organizations over the recent years have published books and articles laying out the basic premises of adapting the RTI model. RTI came into the education spotlight after the reauthorization of IDEA 2004 which permits and encourages the use of a process based on the child's response to intervention to scientific research based intervention (Brown-Chidsey & Steege, 2005; Fernley, 2007; Fuchs & Fuchs, 2006; NASDSE & CASE, 2006; NASDSE, 2005; Norlin, 2007). In response to the new IDEA 2004 regulations the adaptation to RTI models is currently underway in many schools across the country.

RTI has three basic required features. The first component is matching high quality research based instruction/intervention to student need. Second, progress monitoring is used to assess the need for changes in instruction or goals. Third, child response data from progress monitoring is the basis of important educational decisions, which includes decisions regarding special education eligibility (Barnett, Daly, Jones & Lentz, 2004; Brown-Chidsey & Steege, 2005; Fuchs & Fuchs, 2001; Fuchs & Fuchs, 2006; Fuchs, Mock, Morgan & Young, 2003; Kovalesski, 2004; LaRue, 2007; NASDSE & CASE, 2006; NASDSE, 2005; NRCLD, 2003).

The first RTI component, the use of research based instruction/intervention, is defined in No Child Left Behind (NCLB) laws and incorporated in IDEA 2004. NCLB states scientifically based research includes research that utilizes systematic, empirical methods, involves rigorous data analyses, relies on measures or observational methods that are both reliable and valid, is evaluated using experimental or quasi-experimental

designs, ensures the experimental designs are replicable, and has been accepted by a peer-reviewed journal or panel of independent experts (Norlin, 2007). IDEA 2004 requires the use of scientifically based research as defined by NCLB, which aligns IDEA 2004 and NCLB in this area (Brown-Chidsey & Steege, 2005; NASDSE, 2005; Norlin, 2007).

Further, IDEA 2004 permits and encourages the use of a child's response to scientific, research based intervention when determining special education eligibility under the specific learning disability (SLD) category (Brown-Chidsey & Steege, 2005; Fernley, 2007; Fuchs, Mock, Morgan & Young, 2003; Norlin, 2007). According to IDEA 2004, when determining whether a child has a SLD the state must not require the use of discrepancy between IQ and achievement, must permit the use of a child's response to research based intervention, and must permit the use of alternative research based procedures. IDEA 2004 regulations clearly favor the use of RTI in determining whether a child has a SLD, however, it also mandates RTI must not be the sole means of identifying a child with a SLD. Once a child has not responded sufficiently to research based intervention a comprehensive evaluation is required when determining a child's eligibility as with a SLD (Brown-Chidsey & Steege, 2005; NASDSE, 2005; Norlin, 2007).

Many researchers have explored the implications of IDEA 2004 regulations allowing RTI as a means of determining learning disability (LD) classification. In 2003, with the reauthorization of IDEA looming Fuchs, Mock, Morgan, and Young urged stakeholders that more needed to be understood before RTI is viewed as a valid way of identifying students as having a LD, expressing concerns with how quickly RTI should

take prominence, how to control for use of research based interventions, how to ensure fidelity of the interventions implemented, and the continuing need of the use of valid cognitive assessments. Also in the loom of the reauthorization of IDEA 2004, Reschly (2003) presented at the National Research Center on Learning Disabilities' Responsiveness-to-Intervention Symposium and concluded it is time for a change in the LD eligibility construct. Reschly (2003) acknowledged LD identification through RTI has an enormous advantage of establishing the necessary link between identification and treatment. According to Reschly (2003) RTI encompasses several elements known to be closely related to effective treatment such as direct measures, graphing, and formative evaluation. In 2004, Barnett, Daly, Jones and Lentz discussed special education decisions as based on single case designs of increasing and decreasing intensity within a RTI model. Barnett et al (2004) concluded that the least restrictive environment can be obtained through the use of RTI data while increasing and decreasing intensity of the interventions which leads to the establishment of appropriate intervention intensity and help with important special services decisions. In 2006, Fuchs and Fuchs expressed RTI as having strong potential, but also cautioned there are unanswered questions. Fuchs and Fuchs (2006) posit researchers must develop a common approach to define and assess nonresponsiveness within the RTI model in order to limit unreliability of the LD diagnosis.

#### RTI and Reading

RTI has been strongly linked with NCLB's Reading First. Reading First requires schools to use scientific knowledge to guide core curricula decisions and to use valid screening measures and progress monitoring to identify students in need of more



intensive instruction (Fuchs & Fuchs 2006). Further, states are required to submit evidence of how they will incorporate research and evidence based practices to teach and assess students' reading skills across the five domains identified by the National Reading Panel (2000) which includes phonemic awareness, phonics, vocabulary, fluency, and reading comprehension (Brown-Chidsey & Steege, 2005). Early Reading First is another subsection of NCLB which emphasizes the importance of research based reading instruction for early childhood and kindergarten. One can see the apparent connection of RTI and NCLB's Reading First and Early Reading First emphasis on research based methods and progress monitoring to make educational decisions. Not surprisingly, many of the same policymakers behind RTI were also responsible for NCLB's Reading First (Fuchs & Fuchs, 2006).

Due to the link of RTI with NCLB's Reading First, there has been great emphasis on using RTI to identify at-risk readers and provide appropriate research based interventions instead of the traditional IQ-achievement discrepancy waiting to fail model. Stuebing, Fletcher, LeDoux, Lyon, Shaywitz, and Shaywitz (2002) conducted a meta-analysis involving 46 studies questioning the validity of the IQ-discrepancy classifications of reading disabilities. The study revealed substantial overlap between the IQ-discrepant and IQ-consistent poor readers. These results provide little evidence to support the validity of the IQ-discrepancy model of classifying reading disabilities and further questions of the need of IQ tests when identifying these students. The IQ-discrepancy model often delays services for at-risk readers with the wait to fail philosophy (Stuebing et al, 2002). In contrast, RTI provides at-risk readers instruction/intervention at the moment of need preventing chronic school failure (Fuchs

& Fuchs, 2006). The importance of early intervention for students identified as-at risk readers is supported by an extensive body of research which shows by fostering critical pre-reading skills striking outcomes are yielded (Brown-Chidsey & Steege, 2005).

Many other researchers have documented the need to move away from the IQ-achievement discrepancy model and toward the use of RTI in addressing students' reading difficulties. However, even proponents of the RTI perspective in addressing reading difficulties are not without their hesitations. Davis, Lindo, and Compton (2007) contend that RTI has an undeniable advantage over the traditional IQ-achievement discrepancy models in addressing the needs of children with reading disabilities, however, caution that this advantage is dependent on accurate and efficient identification of at-risk children in need of Tier 2 interventions. Similarly, the Instructional Research Group (2006) states RTI holds great promise for assisting struggling readers in comparison to earlier attempts such as the IQ-achievement discrepancy model. Further, the Instructional Research Group (2006) claims RTI gives hope to reducing the inappropriate placement of struggling readers into the LD category. The data collection requirements of RTI will allow the tracking of progress more systematically than in the past. In addition, McEneaney, Lose, and Schwartz (2006) believe RTI is a movement that offers an important opportunity to rethink traditional approaches to reading difficulties, and is a positive step toward a more transactional perspective of reading difficulties, which requires viewing disabilities within broader social and instructional contexts, although are still wary RTI approaches have not gone far enough in acknowledging chronic problems in defining and responding to severe reading difficulties in the past. McEneaney, Lose, and Schwartz (2006) caution unless we are honest about

the failures of the past, RTI may become just another overhyped reform. Finally, Denton, Vaughn, and Fletcher (2003) have also examined the use of RTI to appropriately address the needs of struggling readers. Denton, Vaughn, and Fletcher (2003) posit evidence based instruction must be present in the general education classroom in order to implement RTI, and despite the well established literature base exposing the positive outcomes of the use research based interventions, these interventions are still not widely in place in general education classrooms. Further, the present models of service delivery for struggling readers implemented in schools are often ineffective. Denton, Vaughn, and Fletcher (2003) conclude that the establishment of research based interventions and the overall use of the RTI model in order to better serve struggling readers will rely on the collaboration among researchers, educational practitioners, teacher educators, and policy makers.

Researchers have also pointed out school personnel that specialize in reading or language, such as reading teachers, literacy coaches, and speech-language pathologists (SLPs) may find their roles changing with the adaptation of RTI models. Justice (2006) contends SLPs will play an intricate role in implementing RTI, and views RTI as a necessary step toward preventing reading difficulties. Justice (2006) points out that research has shown a large majority of reading difficulties can be prevented with early and intensive interventions, which can be accomplished utilizing the RTI model. Justice (2006) also points out that literature shows intense and systematic supplemental interventions are needed to help accelerate the reading growth of struggling readers, another area addressed by the RTI model. Justice (2006) encourages SLPs who believe prevention is more powerful than remediation to play important roles in organizing and

supporting reading interventions with an RTI model. Further, the International Reading Association (IRA) (2007) states there will be a greater need for reading teachers and literacy coaches in more expanded roles due to RTI. IRA (2007) points out reading teachers and literacy coaches will be an intricate part in intervention decisions ensuring that interventions are integrally connected with the core reading programs in the classrooms. IRA (2007) further stressed the importance of reading teachers and literacy coaches to be prepared to work in less traditional service delivery and more in consultation and collaboration with other education professionals.

Many studies have been conducted to assess reading outcomes after implementation of RTI and will continue to be conducted as more and more schools adapt the RTI model. Preceding the RTI initiative that began after the reauthorization of IDEA 2004, O'Connor (2000) examined the use of supplemental interventions to address the needs of struggling readers. Both university and school personnel comprised a team that applied layers of interventions across two years, in kindergarten and first grade classes, targeting students who fell below their class averages in reading skills. They set out to reduce the amount of children who make minimal reading progress and to explore interventions to reach students typically labeled as non-responders or treatment resisters. Due to limited funds the school used available resources to intensify instruction for struggling readers. The results were mixed, O'Connor (2000) was successful in reducing reading failure rates among students who received additional interventions, however, the interventions did not significantly reduce the number of children identified for special education. This study has hints of early RTI ideas, the use of intensifying interventions for struggling readers, however, if this study had been done several years later or today

there most likely would have been greater emphasis on the importance of research based interventions and progress monitoring and the RTI model.

Other studies predating the reauthorization of IDEA 2004 with the inclusion of RTI were outlined by Torgesen (2000). Torgesen (2000) reviewed five studies which addressed different methods to prevent reading difficulties with the intent of examining treatment resisters. It was estimated that about 2% to 6% of all children would remain poor readers despite the interventions applied. Torgesen (2000) concluded that in addition to continuing to broaden our knowledge on specific instructional techniques, we must explore the intensity and duration of instruction required to eliminate reading failure in children. Similar to O'Connor (2000), one can also hear hints of RTI in Torgesen's (2000) conclusions, the need for interventions matched to individual student need in regards to intensity and duration.

A very recent study, Silberglitt and Hintz (2007), examined growth expectation in level of performance in reading- curriculum based measurement (R-CBM). The study examined the growth rates of over 7,000 second through sixth graders measured over one year with fall, winter, and spring benchmark assessments. The researchers compared the growth rates of students based on initial level of performance, and found the lowest growth rates at the bottom and top of the distribution. Silberglitt and Hintz (2007) suggest the results of this study cautions against setting goals within the RTI framework using slope criteria based on aggregated average of student performance, regardless of the student's initial level of performance.

Another recent study, Dunn (2007) examined the assessment components of Reading Recovery (RR), a first grade remedial literacy program implemented in over 10,000 U.S. schools and in several other countries, as a future RTI model. The RR program meets the criteria used in RTI research and is reflective of a RTI Tier 2 intervention. This was a retrospective study of third through fifth grade students who had participated in RR during first grade, and investigated the assessment elements of the program, beginning text level, ending text level, and number of weeks of participation in RR. Dunn (2007) concluded that RR assessment elements were significant predictors of first grade students who were later identified as having a reading disability, with ending text level as the strongest predictor. Dunn (2007) suggests the incorporation of ending text level in the identification of a reading disability (RD), not used to explain the entire concept of having a RD, but as an indicator as a need for further assessment.

#### RTI and English Language Learners

While much attention has been given to the use of RTI with struggling readers, little attention has been given to the use of RTI in addressing the special needs of English language learners (ELLs). In addition, there has been little research focusing on the reading development of ELLs (Hagger, 2007; Linan-Thompson, Cirino & Vaughn, 2007; McIntosh, Graves & Gersten, 2007; Vaughn et al., 2006). Hagger (2007) outlined the promises and cautions with the use of RTI with ELLs. Hagger (2007) questions the use of assessments in RTI that are in English given to ELLs in their early schooling years when they are at the beginning stages of acquiring English, with false positives as a concern. Although, Hagger (2007) contends there is some utility in assessment with ELLs as identifying students who would benefit from additional reading instruction.

Ideally, Hagger (2007) believes what would be most practical for schools is research based approaches that are valid and effective for both ELLs and non-ELLs populations because it is not desirable or practical to have one set of tools and procedures for ELLs and another for non-ELLs, and this is an area in need of further research. Also further research is needed to determine if procedures for progress monitoring are valid and useful for ELLs, as well as further defining what constitutes responsiveness or non-responsiveness with ELLs.

Linan-Thompson, Cirino, and Vaughn (2007) address the issue of responsiveness by comparing three approaches to measuring responsiveness in ELLs, and found the discrepancy slope criteria as the best predictor of later performance. Linan-Thompson, Cirino, and Vaughn (2007) call for further research in defining what constitutes adequate responsiveness because a final decision on the criteria for determining whether ELLs' performance is sufficient for them to benefit from classroom instruction alone, or to determine if students would qualify for special education services is not yet clear.

McIntosh, Graves, and Gersten (2007) provide an in depth look at how four classrooms with ELLs implement RTI. Two of the teachers were found to provide high quality tier one instruction as well as high quality supplemental tier two instruction for struggling ELL readers. McIntosh, Graves, and Gersten (2007) concluded the extra support and instruction exhibited by these two teachers greatly contributed to the ELLs' experiencing difficulty growth.

## RTI Concerns and Limitations

The relative newness of the incorporation of RTI within schools has led to many researchers expressing concerns and limitations of the RTI model. The present study seeks to examine one such concern, the issue of ensuring teacher fidelity in the implementation of interventions. Many researchers have acknowledged the need of controlling for teacher fidelity and assuring integrity of interventions (Fernley, 2007; Fuchs & Deshler, 2007; Fuchs, Mock, Morgan & Young, 2003; Gresham, n.d.; Klingner and Edwards, 2006; LaRue, 2007; Mastropieri & Scruggs, 2005; Noell & Gansle, 2006; NRCLD, 2007), although little research addressing this issue has been conducted. Other limitations cited are the possible subjective opinions or teacher bias of students based on their response to intervention (Gerber, 2003; Goodman & Webb, 2006). Questions of whether the use of RTI is appropriate amongst culturally and linguistically diverse students have also been raised (Hagger, 2007; Klinger & Edwards, 2006; Linan-Thompson, Cirino & Vaughn, 2007; Mastropieri & Scruggs, 2005; McIntosh, Graves & Gersten, 2007; Vaughn et al., 2006).

## DIBELS

The Dynamic Indicators of Basic Early Literacy (DIBELS) are a set of standardized, individually administered measures of early literacy development designed to be short, one minute fluency measures used to monitor the development of pre and early reading skills (University of Oregon Center on Teaching and Learning, n.d.). The measures were developed according to the essential early literacy domains set forth from both the National Reading Panel (NRP) (2000) and National Research Council (1998).



The NRP (2000) and National Research Council (1998) identified reading domains essential to reading instruction including phonemic awareness, phonics, vocabulary, fluency, and reading comprehension. In accordance, the DIBELS measures seek to assess student development in phonological awareness, alphabetic understanding, and automaticity and fluency (University of Oregon Center on Teaching and Learning, n.d.). All measures have been researched and proved to be reliable and valid indicators of early literacy skills and predictive of later reading skills to aid in identification of students who may be at risk and not progressing as expected (University of Oregon Center on Teaching and Learning, n.d.). The DIBELS first grade measures are letter naming fluency (LNF), phoneme segmentation fluency (PSF), nonsense word fluency (NWF), and oral reading fluency (ORF), and the present study utilizes a subset of these, the PSF, the NWF, and the ORF.

Much research has gone into validating the use of DIBELS. Several technical reports have been produced demonstrating DIBELS validity and predictive ability. Shaw and Shaw (2002) published a technical report describing the DIBELS ORF predictive ability with the Colorado State Assessment Program (CSAP), a high stakes test in the state of Colorado, and concluded the DIBELS' utility to predict whether the student would score proficient/advanced or unsatisfactory/partially proficient on the CSAP was excellent. Similarly, Barger (2003) compared DIBELS ORF scores with North Carolina End of Grade Reading Assessment, a high stakes test, scores, and concluded the DIBELS ORF as an accurate predictor of whether or not a student will achieve a proficient score on the North Carolina End of Grade Reading Assessment. Subsequently, Buck and Torgesen (2003) explored the relationship between performance on the DIBELS ORF

and the Florida Comprehensive Assessment Test (FCAT), a high stakes test, and found the ORF can quite accurately predict scores on the FCAT. Next, Wilson (2005) examined the DIBELS ORF predictive ability with the Arizona Instrument to Measure Standards (AIMS) and concluded the ORF can identify students who are likely to meet proficiency standards on the AIMS with good accuracy, and can even better identify students who are unlikely to reach proficiency. Lastly, Meer, Lentz, and Stollar (2005) explored the relationship of scores between the DIBELS ORF and the Ohio Proficiency Testing (OPT) in Reading, another high stakes test, and found the correlations between ORF measures and OPT reading assessment were moderately high, concluding the ORF as a predictive measure of the OPT reading assessment.

Many other researchers have sought to establish DIBELS measures as predictive measures on other established measures of critical reading skills, such as high-stakes tests or other standardized reading inventories. For example, Good, Simmons, and Kame'enui (2001) found that meeting benchmark goals on DIBELS ORF was predictive of meeting or exceeding expectations on the Oregon Statewide Assessment, a high-stakes test. Similarly, Hintze, Ryan, and Stoner (2003) examined the correlation between DIBELS kindergarten measures, the letter naming fluency (LNF), initial sound fluency (ISF), and phonemic segmentation fluency (PSF), and the Comprehensive Test of Phonological Processing (CTOPP), and concluded there was a moderate to strong correlation between the DIBELS and CTOPP. Next, Rouse and Fantuzzo (2006) examined the predictive ability of DIBELS subtests letter naming fluency (LNF), phonemic segmentation fluency (PSF), and nonsense word fluency (NWF) on teacher report, individual assessments, and group-administered nationally standardized tests, and determined significant concurrent

and predictive validity existed. Finally, Riedel (2007) explored the relationship between DIBELS, specifically using the subtests letter naming fluency (LNF), phonemic segmentation fluency (PSF), nonsense word fluency (NWF), oral reading fluency (ORF), and retell fluency (RF), and reading comprehension measure, the Group Reading Assessment and Diagnostic Evaluation (GRA+DE) for first graders, and TerraNova Reading subtest for second graders. Riedel (2007) concluded that the DIBELS ORF alone was the best predictor for comprehension, as measured by the GRA+DE and TerraNova, better than any of the other DIBELS subtests used in the study.

While many researchers have studied if DIBELS measures could be used as predictive measures on high-stakes reading tests, other researchers have examined the use of DIBELS measures to accurately identify students at risk for reading failure. For example, Elliot, Lee, and Tollefson (2001) looked at a modified set of DIBELS kindergarten measures (DIBELS-M) in comparison to three standardized achievement measures, the Woodcock-Johnson Psycho-Educational Achievement Battery-Revised (WJ-R), the Test of Phonological Awareness (TOPA), and the Developing Skills Checklist (DSC), as well as teacher rating scale, Teacher Rating Questionnaire (TRQ), and a brief intelligence test, the Kaufman Brief Intelligence Test (K-BIT). The modified version included measures of letter naming fluency, sound naming fluency, initial phoneme ability, and phonemic segmentation ability. Elliot, Lee, and Tollefson (2001) concluded the results of the analysis support the use of the DIBELS-M measures for identifying kindergarten students at risk for reading failure. Next, Gunn, Smolkowski, Biglan, and Black (2002) examined the use of DIBELS measures in screening students in kindergarten through third grade to determine which students were in need of

supplemental reading instruction. Students who were identified in need of supplemental reading instruction based on DIBELS measures were then randomly assigned to receive or not receive two years of supplemental reading instruction. It was concluded the children who received the supplemental reading instruction performed better on reading inventory measures, acknowledging the use of DIBELS measures as means of identifying students at risk of reading failure and in need of more intense instruction (Gunn, Smolkowski, Biglan & Black, 2002). Similarly, Kamps et al. (2003) utilized DIBELS measures to determine academic risk for students in kindergarten through second grade. Students were also measured for behavioral risk, and it was determined students with both academic and behavioral risk made the least progress in the reading curriculum (Kamps et al., 2003). Next, Roberts, Good, and Corcoran (2005) examined the use of DIBELS retell fluency measures as indicators of reading comprehension, and results of the study proved modest support for adding measures of retell fluency to existing fluency based measures. It was concluded that retell fluency provides an efficient tool to supplement oral reading fluency for the handful of children whose oral reading fluency does not accurately represent comprehension. Further, when used together with oral fluency measures, retell measures provide a more reliable way of maximizing efficiency and effectiveness of early reading instruction. Lastly, Allor, Gansle, and Denny (2006) utilized DIBELS measures to identify and evaluate the progress of kindergarten students experiencing difficulty with phonemic awareness. It was concluded all students made gains in phonemic segmentation fluency (PSF), with most reaching or exceeding benchmarks after the implementation of an intervention. DIBELS was instrumental in

identifying students at risk of reading failure and provided means of progress monitoring during interventions (Allor, Gansle & Denny, 2006).

Overall, DIBELS makes identifying at risk readers and progress monitoring in standardized ways possible. Many researchers have evaluated the use of DIBELS and have reported positive results. Some have even claimed DIBELS allows school personnel to “work smarter, not harder” and to do their jobs more effectively and efficiently (Brown, 2006). Furthermore, many claim DIBELS provides a way of unifying reading instruction within the grade levels (Olson, 2007). Largely, DIBELS can be viewed as a major advancement in early literacy comprehensive school wide assessment that can provide schools with a wealth of critical information about students’ foundational beginning reading skills (Coyne & Harn, 2006).

#### DIBELS Opponents

While DIBELS has gained much positive attention over the years, it has also caused a great deal of controversy nationwide (Dessoiff, 2007; Olson, 2007). DIBELS is not approved for use under the federal Reading Program in 45 states, and consequently questions of conflicts of interest have arisen due to the fact that the researchers behind DIBELS also served as consultants on implementing Reading First. There have also been accusations that several federal consultants with financial ties to DIBELS are advising states in Reading First convincing those states to incorporate DIBELS into their grant proposals for Reading First. Further, many critics believe DIBELS’ ability to measure reading skills is being oversold due to these financial connections (Dessoiff, 2007; Goodman, 2007; Lewis, 2006; Manzo, 2005; Olson, 2007).

A second major area of criticism exists in the DIBELS ability to accurately assess reading comprehension. Goodman (2007) states no DIBELS measure tests what it says it tests. Moreover, Goodman (2007) claims no test measures what the reader actually comprehends which leads to undervaluing students who already comprehend and overrating students who race through the tests with no comprehension. Further, Goodman (2007) points to the absurdity in the use of DIBELS in many regards and concludes with proclaiming this period in American education will be known as the pedagogy of the absurd. Overall, many researchers have called for more studies to be conducted by scholars not associated with the test, and for a broader range of reading skills, including comprehension, to be assessed (Olson, 2007; Pressley, Hilden, & Shankland, 2005).

## Summary

As evidenced by the review of the literature, many scholars are urging school districts to begin moving away from the IQ-discrepancy model toward the Response to Intervention model. The RTI model promises to meet the needs of struggling students more quickly and efficiently compared to the IQ-discrepancy model. The use of RTI to address the needs of struggling readers has been thoroughly examined and called for by researchers. Further, the use of Dynamic Indicators of Basic Early Literacy Skills measures have also been examined by researchers for the use of identifying students at risk for reading failure and for the means of progress monitoring, making the use of DIBELS a good fit in the RTI model. However, RTI and DIBELS have not gone without researchers addressing their limitations, concerns, and calling for additional research.

The present study attempts to address one such concern of RTI, the need for controlling the fidelity of the implementation of interventions.

## Chapter Three: Design of the Study

### Sample

This study, examining the effect of the formal recording of interventions by teachers for students in RTI Tier I reading achievement in an attempt to control for teacher fidelity, drew from the kindergarten and first grade of eight elementary schools in a large suburban public school district in southern New Jersey. The school district's Distract Factor Group (DFG) code, an approximate measure of the community's relative socioeconomic status (SES), is DE which indicates moderate to low SES. The students participating in this study were chosen based on their previously decided inclusion in the schools' RTI Tier I for reading. The tier decisions were made based on the students' performance on Dynamic Indicators of Basic Early Literacy (DIBELS) kindergarten and first grade universal screening measures. Scores designating students as at-risk, as defined by DIBELS, was the deciding factor for including students in RTI Tier I. The total sample size is 97 students, and all students were either in kindergarten or first grade.

### Measures

Each student's progress in Tier I was monitored weekly by the use of DIBELS kindergarten and first grade measures. The data used in this study was drawn from three subtests of DIBELS kindergarten and first grade measures, the Initial Sound Fluency



(ISF), the Phoneme Segmentation Fluency (PSF), and the Nonsense Word Fluency (NWF).

The ISF is a standardized, individually administered test that assesses the student's ability to recognize and produce the initial sound of an orally presented word. The student is presented with four pictures and the test administrator says the name of each while pointing to the corresponding picture. The administrator then asks the student to point to or say the picture that begins with the sound produced orally by the administrator. The ISF is a revision of the measure formally called Onset Recognition Fluency (OnRF). The OnRF alternate form reliability in January of kindergarten is .72. If the assessment is repeated four times the resulting reliability average is .91. The concurrent criterion-related validity of OnRF with the DIBELS PSF is .48 in January of kindergarten and .36 with the Woodcock-Johnson Psycho-Educational Battery Readiness Cluster score. The predictive validity of OnRF with the spring of first grade reading on Curriculum Based Measurement (CBM) ORF is .45, and .36 with the Woodcock-Johnson Psycho-Educational Battery Total Reading Cluster score (University of Oregon Center on Teaching and Learning, n.d.).

The PSF is a standardized individually administered test assessing the student's ability to segment three and four phoneme words fluently. The test administrator presents the words to be segmented orally. The number of correct phonemes produced in one minute determines the final score. The two-week alternate form reliability is .88, and the one month alternate form reliability is .79 in May of kindergarten. Concurrent criterion validity with the Woodcock-Johnson Psycho-Educational Battery Readiness Cluster score in spring of kindergarten is .54. The predictive validity of spring of kindergarten PSF

with winter of first grade DIBELS NWF is .63, with spring of first grade Woodcock-Johnson Psycho-Educational Battery total Reading Cluster score is .68, and with spring of first grade CBM ORF is .62 (University of Oregon Center on Teaching and Learning, n.d.).

The NWF is a standardized, individually administered test of the alphabetic principle. It tests students' letter-sound correspondence and ability to blend letters into words. The student is presented a sheet of paper with randomly ordered VC and CVC nonsense words and asked to produce the individual letter sound of each letter in the word or verbally produce the whole nonsense word. The student is given one minute to produce as many letter-sounds or whole words as he or she can, and the final score is the number produced correctly. Students receive higher scores for whole words than letter-sounds. The one-month alternate-forms reliability for NWF in January of first grade is .83. The concurrent criterion-validity of NWF with the Woodcock-Johnson Psycho-Educational Battery-Revised Readiness Cluster score is .36 in January and .59 in February of first grade. The predictive validity of NWF in January of first grade with CBM ORF in May of first grade is .82, .60 in May of second grade, and .66 with Woodcock-Johnson Psycho-Educational Battery Total Reading Cluster score (University of Oregon Center on Teaching and Learning, n.d.).

## Design

In order to best compare if a relationship exists between teacher's formally logging interventions implemented for students in RTI Tier I of reading and students' progress in reading achievement, measured by performance on DIBELS ISF, PSF, and

NWF scores, a pretest-posttest design was used with the DIBELS subtest scores.

Teachers of kindergarten and first grade students from five elementary schools formally recorded the interventions as well as the frequency, duration, intensity, and group size of the interventions on a “RTI-Student Intervention Tracking Form” for RTI Tier I students, rendering this group the experimental group. In the control group, teachers of kindergarten and first grade students from the three other elementary schools in the district did not alter their intervention tracking procedures in any manner. The ISF subtest was the measure used to assess the kindergarten students while the PSF and NWF were the measures used to assess the first grade students. The independent variable was whether or the not the teacher used the “RTI-Student Intervention Tracking Form.” The dependent variable was students’ posttest DIBELS scores. A multivariate ANOVA was used to analyze the data.

### Hypothesis

This study hypothesized that after eight weeks students in the experimental group, in which teachers formally recorded interventions implemented as well as the frequency, duration, intensity, and group size of interventions on the “RTI-Student Intervention Tracking Form” for kindergarten and first grade students in RTI Tier I of reading, would achieve higher posttest scores on the DIBELS subtests ISF, PSF, and NWF, in comparison to students in the control group, in which teachers did not alter their intervention tracking procedures in any manner. The null hypothesis stated that the use of the “RTI-Student Intervention Tracking Form” would have no effect on students’ reading achievement as measured by the DIBELS subtests ISF, PSF, and NWF posttest scores. This study sought to reject the null hypothesis at a 95 percent confidence level.

## Procedure

The first step of this study was to contact the school district and learn of the RTI model utilized within their schools. The researcher and several supervisors and administrators of the school district identified teacher fidelity as an area of concern, and the research question was developed to fit appropriately within their kindergarten and first grade curriculum. Next, the eight elementary schools in the district were randomly assigned to be in the experimental or control group. Meetings were held with the principals of the schools, supervisors, and administrators, and the “RTI-Student Intervention Tracking Form” was developed for use in the experimental group schools for students in RTI Tier I in reading. The principals were then asked to disseminate the information and form to the teachers. Teachers were asked to hand in their forms weekly to the principals. The researcher was given access to pre-implementation of the “RTI-Student Intervention Tracking Form” DIBELS scores along with post scores after eight weeks of use of the form for students in kindergarten and first grade in Tier I of reading from the experimental group schools. The researcher was also given access to the DIBELS scores of kindergarten and first grade students in Tier I of reading in the schools in the control group for the same pre and post time frame. The identities of the students were concealed by the researcher and the data was then analyzed.

## Summary

The focus of this study was to examine if formally recording the interventions as well as the frequency, duration, intensity, and group size of interventions implemented for students in RTI Tier I in reading as an attempt to control for teacher fidelity would

result in increased reading achievement as measured by several DIBELS subtests. This study hypothesized that after eight weeks students in the experimental group, in which teachers formally recorded interventions implemented as well as the frequency, duration, intensity, and group size of interventions on the “RTI-Student Intervention Tracking Form” for kindergarten and first grade students in RTI Tier I of reading, would achieve higher posttest scores on the DIBELS subtests ISF, PSF, and NWF in comparison to students in the control group, in which teachers did not alter their intervention tracking procedures in any manner. The independent variable was whether or the not the teacher used the “RTI-Student Intervention Tracking Form.” The dependent variable was students’ posttest DIBELS scores.

## Chapter Four: Analysis of Results

### Introduction

There were 68 total participants included in this study. The experimental group included 30 students while the control group included 38 students. The data was manipulated by several variables including pretest, posttest, condition (experimental or control group), and by the test (ISF, PSF, or NWF). The data was analyzed by a multivariate ANOVA. An alpha level of .05 was used for all statistical tests.

### Results

The condition, either being included in the experimental or control group was shown to be statistically significant at the posttest level,  $F(1,67)=5.414$ ,  $p<.05$ . Contrary to the hypothesis this significance lies within the control group, as shown by figures 4.1 and 4.2.

Figure 4.1 Mean Pretest Scores by Condition

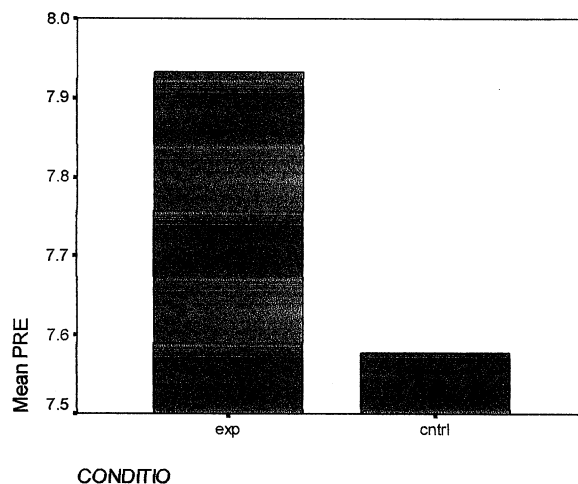
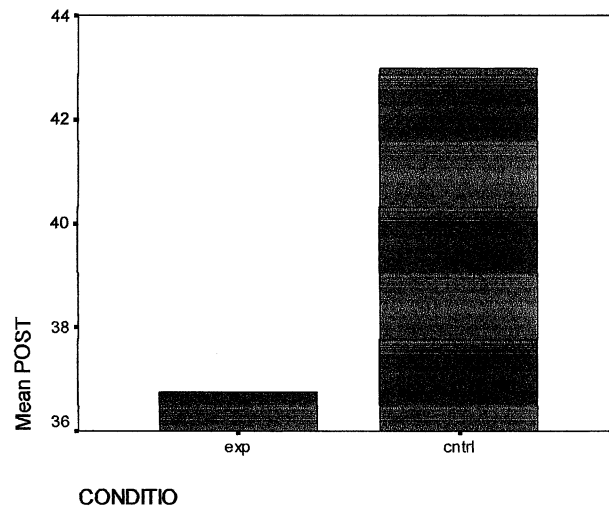


Figure 4.2 Mean Posttest Scores by Condition



The interaction effect of the condition, experimental or control, and the test, ISF, PSF, or NWF, was also shown to be statistically significant at the posttest level,  $F(2,67)=9.777, p<.01$ . Contrary to the hypothesis this significance lies within the ISF of the control group, as shown by figures 4.3, 4.4, and table 4.5,

Figure 4.3 Mean Pretest Scores by Subtest

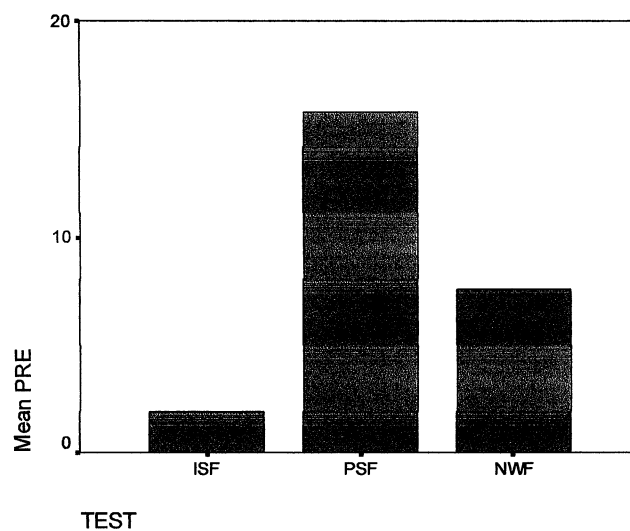


Figure 4.4 Mean Posttest Scores by Subtest

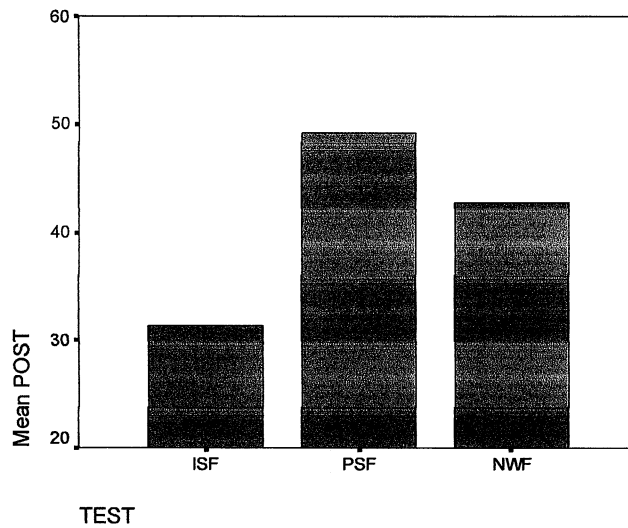


Table 4.1 Overall Pre and Post Means by Condition and Subtest

	ISF	PSF	NWF
	Mean	Mean	Mean
exp	2.00	14.60	7.20
	16.53	51.27	42.47
cntrl	1.79	17.07	8.00
	40.63	46.86	43.14

### Summary

The hypothesis that after eight weeks students in the experimental group would achieve higher posttest scores on the DIBELS subtests ISF, PSF, and NWF in comparison to students in the control group was not proven to hold true. However, the null hypothesis which stated there would be no difference in the posttest scores between the experimental and control group was also found to be untrue, and therefore the null



hypothesis was rejected at a 95 percent confidence level. It was found that the control group made statistically significant gains over the experimental group in the ISF DIBELS subtest. The implications of these findings will be discussed in the following chapter, along with the limitations of the study, and need for further research.

## Chapter Five: Discussion and Implications

### Introduction

This study set out to fill a gap in the current body of research addressing the concern of teacher fidelity within the Response to Intervention model. The researcher attempted to control for teacher fidelity by the use of a “RTI-Student Intervention Tracking Form” whereby the teacher formally recorded the intervention implemented as well as the frequency, duration, intensity, and group size of the intervention. The design of the study included an experimental group, those using the “RTI-Student Intervention Tracking Form,” and a control group, those who did not change intervention tracking procedures in any manner. Progress was assessed by the use of kindergarten and first grade Dynamic Indicators of Basic Early Literacy Skills subtests, the Initial Sound Fluency, Phonemic Segmentation Fluency, and Nonsense Word Fluency. The ISF subtest was the measure used to assess the kindergarten students while the PSF and NWF were the measures used to assess the first grade students. Scores were taken pre-implementation of the “RTI-Student Intervention Tracking Form” and 8 weeks post-implementation of the tracking form. It was hypothesized the experimental group would make statistically significant gains in reading achievement in comparison to the control group as measured by the DIBELS ISF, PSF, and NWF pre and post tests. Contrary to the hypothesis, it was found that the control group made statistically significant gains on the ISF subtest in comparison with the experimental group, while the other two subtests, PSF and NWF, showed comparable pre and post scores between both the experimental and control groups.

## Interpretation of Finding

This study found a statistically significant difference between the experimental and control group at the level of the control group's posttest ISF mean score. As displayed in table 4.5 in the previous chapter, the experimental group's mean ISF scores were 2.00 pretest and 16.53 posttest, while the control group's mean ISF scores were 1.79 pretest and 40.63 posttest. It is worth noting a high proportion of scores of zero within this kindergarten DIBELS subtest at the pretest level. The experimental group (N=15) had 7 students score a zero. The control group (N=24) had 15 students score a zero. These zero scores are reflected in the low pretest mean scores of both the experimental and control groups, however, do not explain the significant gain made by the control group.

This study did not find a statistically significant difference between the experimental and control group for either the PSF or NWF pre or post scores. As displayed in table 4.5 in the previous chapter, the experimental group's mean PSF scores were 14.60 pretest and 51.27 posttest, while the control group's mean PSF scores were 17.07 pretest and 46.86 posttest. The experimental group's mean NWF scores were 7.20 pretest and 42.47 posttest, while the control group's mean NWF scores were 8.00 pretest and 43.14 posttest.

The present study attempted to fill a gap in the current body of literature and research addressing the concern of teacher fidelity within the Response to Intervention model. Several researchers have called for a need of research in this area. Noell and Gansle (2006) reveal that implementation of interventions has received little attention in the RTI literature and emphasize the necessity of documentation that interventions were

in fact implemented. Noell and Gansle (2006) further assert even with high quality pre-intervention assessments, intervention design, progress monitoring, and data evaluation, without guaranteeing implementation of the intervention, the system becomes a hollow shell that produces meaningless outcomes. Similarly, Fuchs and Deshler (2007) contend there are many unanswered questions that need to be examined and considered when implementing RTI. Fuchs and Deshler (2007) urge districts, schools, and administrators to set expectations for the implementation of RTI, provide adequate resources, and support the use of procedures that ensure fidelity of intervention. However, the present study did not support the use of documentation of interventions implemented as an attempt to control for teacher fidelity, by means of the “RTI-Student Intervention Tracking Form,” would result in increased student reading achievement as measured by DIBELS subtests ISF, PSF, and NWF.

#### Limitations

Several limitations exist within this study. First, the assumption was made that the use of the “RTI-Student Intervention Tracking Form” was a valid means of controlling for teacher fidelity. While it is likely the intervention tracking form brought heightened awareness for the teachers of the importance of the intervention, it did not necessarily guarantee interventions were implemented with fidelity. There is no certainty that the teachers in the experimental group implemented the interventions with more fidelity than the teachers of the control group who did not record on the “RTI-Student Intervention Tracking Form.” Further, it is possible that some teachers in the control group may have been using their own non-uniform method of documentation.

Secondly, after review of the “RTI-Student Intervention Tracking Forms” the researcher found the forms to have been completed on various levels. Some teachers were highly meticulous and filled out all required details, while other teachers were very vague and missed some important details on the forms. This was expected to some degree for two reasons. First, the introduction of a new tracking form requires an adjustment on the part of the teacher. This was evidenced by the fact that forms appeared to be more completely filled out as the eight week time period progressed. Second, differences in teacher attitudes and personalities may have resulted in varying levels of cooperation in the use of the tracking form. An attempt was made to control for this by requiring the teachers to turn in the forms weekly to the principals of the schools.

A third limitation of this study is the fact that kindergarten students are unreliable test takers. The kindergarten students’ scores are represented only in the ISF subtest of this study. The ISF was the only subtest to have a significant difference between the experimental and control groups, and this difference was found at the posttest level. The fact that kindergarten students are unreliable test takers may be one explanation for this unexpected significant finding. Further, the ISF was the only test to have many scores of zero at the pretest level. These zeros could be reflective of the fact that kindergarten students are unreliable test takers. The pretest scores were taken from the universal screening which was the determining factor for placing students in the RTI tiers. It is possible the zero scores were unreliable scores and students were falsely identified as needing Tier I interventions. This is one possible explanation for the significant gains made by the control group on the ISF subtest.

## Conclusions

This study set out to fill a gap in the current body of research addressing the concern of teacher fidelity within the Response to Intervention model. The researcher attempted to control for teacher fidelity by the use of a “RTI-Student Intervention Tracking Form” whereby teachers in the experimental group formally recorded the intervention implemented as well as the frequency, duration, intensity, and group size of the intervention. From the present study it cannot be concluded that the use of the “RTI-Student Intervention Tracking Form” made a positive impact on kindergarten and first grade students in RTI Tier I reading achievement as measured by the DIBELS subtests ISF, PSF, and NWF. In fact, it is possible this form had a negative impact on student’s reading achievement as evidenced by the statistically significant difference between the pre and post tests of the kindergarten students ISF scores with the control group making significant gains in comparison to the experimental group. It is possible the use of the form was time consuming for the teachers and took away from valuable instruction. However, since there were no significant differences between the experimental group and control group for the other two subtests, PSF and NWF, it is also possible the explanation lies within the limitations of the study as cited previously. A strength of this study is that it attempted to fill a gap in the research on RTI concerning the issue of teacher fidelity. RTI is a cutting edge movement in education nation wide. However, a weakness of the study was that the researcher assumed teacher fidelity could be controlled for by the use of the “RTI-Student Intervention Tracking Form.” Another strength of the study is that it utilized a very large public school district in New Jersey; however, this is also a weakness

since results cannot be generalized from one population given factors like the district's DFG code.

#### Implications for Further Study

There is an undeniable need to continue to attempt to fill the gap in RTI research concerning the area of teacher fidelity. Teacher fidelity is a difficult matter to control for and the only methods of researching this issue that would guarantee complete adherence and faithfulness in implementing interventions in RTI would be extremely invasive to the teachers and students such as direct and constant observation or video recording.

Therefore, additional research is needed in addressing the issue of teacher fidelity by use of documentation forms as well as exploring other possible techniques. However, the findings of the present study should not be ignored. The possibility that documentation may hinder the intervention or progress made by the student should be further examined.

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## Appendix

### RTI Student Intervention Tracking Form

Elementary School  
**RTI – Student Intervention Tracking Form**

Student Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Teacher: \_\_\_\_\_

Beginning DIBELS Scores (list scores available): ISF: \_\_\_\_\_ PSF: \_\_\_\_\_ NWF: \_\_\_\_\_ ORF: \_\_\_\_\_ Tier: \_\_\_\_\_

Targeted Skills for this cycle: \_\_\_\_\_

Week of	Date	Length in min	# of Students per group	Intervention Attempted	Observations of Student Response to Intervention	DIBELS Prog. Mon. Scores*
						ISF:  PSF:  NWF:  ORF:
						ISF:  PSF:  NWF:  ORF:
						ISF:  PSF:  NWF:  ORF:
						ISF:  PSF:  NWF:  ORF:
						ISF:  PSF:  NWF:  ORF:

						ISF: PSF: NWF: ORF:
						ISF: PSF: NWF: ORF:
						ISF: PSF: NWF: ORF:

Teacher's Summary of Student Response to Intervention:

RTI Team – Tier Placement for Next Cycle: \_\_\_\_\_ - Date of Meeting \_\_\_\_\_

Suggested interventions for the next cycle:

*\*Attach Progress Monitoring Graphs printed from DIBELS website*